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DOI:
[10.1075/rcl.14.1.03lit](https://doi.org/10.1075/rcl.14.1.03lit)

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Document Version
Peer reviewed version

Citation for published version (Harvard):
Littlemore, J, May, A & Arizono, S 2016, 'The interpretation of metonymy by Japanese learners of English', *Review of Cognitive Linguistics*, vol. 14, no. 1, pp. 51-72. <https://doi.org/10.1075/rcl.14.1.03lit>

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Publisher Rights Statement:
Final Version of Record available at: <http://dx.doi.org/10.1075/rcl.14.1.03lit>
First checked 1/2/2016

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The Interpretation of Metonymy by Japanese Learners of English

Jeannette Littlemore, Satomi Arizono and Alice May

Abstract

Figurative language can present both difficulties and opportunities in cross-linguistic and cross-cultural communication. Previous studies have focused on metaphor comprehension by speakers of different languages, but metonymy comprehension is a relatively under-researched area. In this paper, we describe a two-part study exploring metonymy comprehension by Japanese learners of English. In the first part of the study, ten Japanese learners of English were asked to explain the meanings of twenty expressions instantiating a range of metonymy types. Comprehension problems included: the missing of, or misuse of, contextual clues; reluctance to ‘make a guess’; positive and negative interference from Japanese; ‘underspecification’; and a tendency to interpret metonymies as if they were metaphors. The second part of the study focused on the functions performed by metonymy. Twenty-two Japanese learners of English were asked to interpret a set of twenty metonymies, each of which performed a particular function. Metonymies serving complex functions such as humour, irony and hyperbole were significantly more difficult to understand than ones that served more ‘straightforward’ functions, such as hyperbole and positive evaluation. Comprehension difficulties were related to the extent to which the examples violated the cognitive principles underlying ‘typical’ vehicle selection.

Introduction

Figurative language can present difficulties to language learners and to people involved in cross-linguistic and cross-cultural communication (Littlemore and Low, 2006). Most of the studies that have explored these difficulties have focused on metaphor. For example, in their exploration of the difficulties that metaphor presented to a group of international students studying on a Foundation Programme at a British university, Littlemore et al. (2011) identified a number of error types, including the misuse of contextual cues, over and under-specification, the misattribution of source domain features, and a failure to identify the appropriate target when they explore. Misunderstandings such as these are important as an inability to understand metaphor can lead to an inability to understand a person’s stance towards the topic they are discussing (Littlemore, 2001a).

A type of figurative language that has not been investigated in relation to cross-linguistic differences and language learning is metonymy. Metonymy is a cognitive linguistic process whereby one entity is used to refer to another, related, entity (Kövecses and Radden, 1998). For example, the word ‘Hoover’ can be used to mean vacuum cleaner, via a PRODUCER FOR PRODUCT relationship, or we might say that we ‘need a drink’, to refer specifically to alcoholic drink, which would evoke a WHOLE FOR PART metonymic relationship. We might say that we need ‘some muscle’, when what we need is a strong person to help us move some furniture, thus evoking a DEFINING PROPERTY FOR CATEGORY metonymic relationship, and so on and so forth. Metonymic meanings can be subtle and easily missed by language learners, whose languages will not necessarily contain the same metonymic references as those employed by the target language. Indeed, there is a growing amount of literature exploring cross-linguistic variation in metonymy and its grammatical repercussions across a wide range of languages, and it would not be surprising if this variation were to lead to misunderstandings. However, in the context of foreign language learning and teaching, the

complex and content-sensitive role of metonymy tends to be ignored, and there have been no studies to date of the types of misunderstanding that might occur when language students are confronted with metonymy. It would be useful to be aware of the types of problems that metonymy presents to language learners. This information is likely to be particularly useful for language teachers as they can use it to identify and explain the nature and origin of the error to their students.

A few anecdotal instances of metonymy causing confusion have been observed. For example, Littlemore (2001a) noted the misunderstanding of the expression ‘can-do Civil Servants’ by a group of Bangladeshi Civil Servants studying in the UK. They took it to mean ‘capable’ employees, thus missing the metonymic meaning of enthusiastic and positive in outlook. One of the students in the study went on to interpret the expression in the following way: ‘The lecturer feels that the changes made by Thatcher could make it possible to select out a number of abled and working Civil Servants who could perform their assigned duties properly.’ Here he has focused on the ‘ability’ of the Civil Servant to do as he is told, rather than the possession of the sorts of creative problem-solving skills that are implied by the term ‘can-do’. In their study of metaphor comprehension by international students on a Foundation Programme, Littlemore et al. (2011) also identified a number of instances of metonymy miscomprehension but these were not analysed as the focus of the study was on metaphor.

The problem is likely to be exacerbated by the fact that metonymic motivations are not always predictable and are often highly context-specific. Moreover, metonymic meanings are often tied to specific phraseological patternings, with which the speakers of other languages may not be familiar. For example, the metonymic expressions ‘legged it’ (ran away quickly) ‘pencilled in’ (made a temporary arrangement), and ‘eyed up’ (looked at appreciatively) all rely on particular combinations of words, and the meanings would be lost if the ‘it’, the ‘in’ and the ‘up’ were not there. This correlation between metonymy and phraseology has been well documented (Deignan, 2005; Goldberg, 1995).

Another, relatively underexplored feature of metonymy is that it can be used to serve a wide variety of functions. Although traditional accounts have tended to focus on its referential function, metonymy has also been found to serve as an important resource in conveying humour, irony, sarcasm, hyperbole, euphemism and dysphemism (Littlemore, 2015).

It has also been found that speakers of other languages are much less likely to ‘notice’ metonymy than metaphor. Chen and Lai (2012) asked twenty-eight Taiwanese learners of English as a Foreign Language (EFL) and asked them to rate 40 sentences based on their certainty of figurative language use. The students in the study were able to distinguish between sentences with and without figurative expressions, but they were significantly more sure of themselves when judging metaphoric expressions than metonymic ones. They suggest that it may be worth encouraging learners to focus on metonymy in order to develop their levels of figurative competence in the target language.

One group of learners who may find it particularly difficult to understand metonymy are Japanese learners of English. There are three reasons why it is particularly interesting focus on these learners. Firstly, students in English language classrooms in Japan are not generally encouraged to ‘play’ with the language or to explore its figurative potential. Secondly, Japanese is so different from English that there are very few opportunities for transfer. Thirdly, the Japanese Ministry of Education, Culture, Sports, Science and Technology is interested in promoting the development of communicative competence in language

classrooms throughout Japan. Developing the ability to understand metonymic uses of English is likely to make a contribution to this goal. The aim of the study described in this paper is therefore to investigate the extent to which Japanese learners of English are able to comprehend metonymy.

In our paper, we describe a two-part study which explored metonymy comprehension in Japanese learners of English. In the first part of the study, ten Japanese students were asked to explain the meanings of twenty expressions instantiating a range of metonymy types. The aims of this part of the study were to establish: what kinds of strategies Japanese-speaking learners of English employ in order to comprehend the metonymic expressions in context, what factors contribute to successful metonymy comprehension, what kinds of errors these learners make when they interpret the meanings of the metonymic expressions, and what factors present obstacles to successful metonymy comprehension. In the second part of the study, which involved twenty-two Japanese learners of English living in Japan, we focused on the functions performed by metonymy. Our aim was to establish whether the function being performed by the metonyms would affect the student's ability to understand them.

Methodology

In part 1 of the study, ten Japanese-speaking graduate students studying at a British university (IELTS: 5.5-6.5) were presented with twenty metonyms in context. The metonyms had all been identified in the British National Corpus (BNC) and Webcorp. They were asked to explain the meanings orally and to provide details about how they derived them. To avoid the possibility that participants may have difficulty in explaining their ideas, interviews were conducted in Japanese. Participants were not informed that the purpose of the study was to explore metonymy comprehension. Each interview was recorded on video. The participants first read the whole text including the metonymic expression, and were asked what the underlined expression referred to in context. Subsequently, they were required to motivate their responses, being asked how they derived the meaning. This series of procedures was conducted for all 20 expressions. Meanings of unfamiliar words in context which had been identified in a pre-test were written below the words in Japanese in advance. If participants had a problem understanding any of the other words in the text, the researcher told them their meanings in context. A full list of the examples used can be found in Appendix 1. The responses were scored by two native speakers of English, with a score of 2 being allocated to those that were deemed 'correct', 1 for those that were 'partially incorrect' and 0 for those that were 'incorrect'. The 'incorrect' and 'partially incorrect' responses were then categorised into error types by the two judges.

In part 2 of the study, 22 intermediate-to-advanced English-speaking Japanese participants, all of whom were located in Japan, were presented with nineteen authentic metonyms, which were again identified in the BNC and Webcorp. The metonyms were classified according to the function they performed in context. The functions included humour, irony, sarcasm, euphemism, dysphemism, positive and negative evaluation, and hyperbole. They were asked to write down what they thought the expressions meant. Their responses were compared with those given by two control participants, both of whom were native speakers of English.

A full list of the metonymic expressions in their contexts, as they were presented to the students, can be found in Appendix 2. Here we discuss some of our explanations for metonymy choice. The first is an example of a metonymy serving a euphemistic function:

'Take all the time you need. When you've finished, why not pop along and join us? I'll keep the coffee hot and try to save you a biscuit or two. Niall may even have surfaced by the time you join us.'

'I'll be there. By the way, is there somewhere where I can freshen up'?

'Sure, at the end of the ward and along the corridor.'

Here, the generic process of 'freshening oneself up' is deliberately vague in that it metonymically represents the more specific activities that one might actually intend to do in the bathroom. These would not only be more embarrassing should they be explicitly stated, but also likely break the maxims of quantity and relation, or relevance. As opposed to the common, simpler alternative "go to the bathroom", "freshen up" can metonymically serve in the broader sense of not only representing using the toilet, but also reapplying make-up, brushing your teeth, applying deodorant or perfume, changing your shirt, and so on. This is clearly more information or detail than the listener requires, and so "freshen up" is not only face-saving or euphemistic, but also 'linguistically economical'; a fundamental feature of metonymy.

The next examples is of a metonymy performing humour:

"Local high school drop-outs cut in half"

In this newspaper headline there exists a double metonymic reading frame. The structure is such that the reader or hearer is (intended to be) amused by entertaining two possible interpretations. The more conventional being that the number of high school drop-outs has reduced by 50%, and the more unexpected that the students themselves have been physically cut in half. Clearly an instance of dark humour, this may evoke dramatic or comical images of frustrated teachers or parents slicing students in half through sheer frustration at their lack of diligence in study.

Here is an example of a metonymy performing hyperbole:

The three other members of her party looked around in surprise as the blonde gave a squeal of delight and walked unsteadily across to Yanto. Billie's eyes popped out as she kissed Yanto on the cheek and flopped into a chair beside him. 'My hero,' she laughed, and looked at Billy.

Eyes physically popping out from their sockets is the exaggerated symptom contiguously related to being very wide-eyed in surprise. This physical manifestation then metonymically represents the causative feeling of surprise or disbelief.

Here is an example of a metonymy performing sarcasm:

Santa Barbara and many other bike-friendly cities have bike racks on every block of their downtown, and beautification projects that don't make life ugly for bicyclists. As a result, they have more people bicycling. Hey, it isn't brain surgery. Provide facilities that make bicycling easy and pleasant, and people will do it.

In this example, "it" - the matter of improving conditions for cyclists- would be contiguously related to brain surgery as a prototypically complicated and difficult task. Here, however, in the intended sarcasm and negative, the opposite reading is taken; that the task is not related to

brain surgery in its level of difficulty or intricacy. It is instead thought to be rather simple and shouldn't be approached as otherwise.

The next example is of a metonymy performing irony:

With a sigh of impatience Jake leaned back in his seat and ran his fingers through his thick dark hair. 'OK, I'll spell it out to you, if that's what you want. My father left Kirsty a considerable amount of money to be held in trust until she reaches eighteen...' He paused. 'Do I really need to go any further?'

Here, the more concrete action of spelling something out letter by letter metonymically represents the more abstract one of explaining something in clear detail or a simplified manner. As evident in the BNC, "spell it out" is typically used to imply the listener is slow to 'catch on' or understand fully. Here we can sense Jake's irritation at being pressed for more information in 'Do I really need to go any further?' and the irony intent in his use of "spell it out".

Here is an example of metonymy performing dysphemism:

Critically review your own experience and learn. Attend training courses and learn. Do not attempt to broaden your boundaries by becoming an expert in everything. Keep your mouth shut when another person talks. Listen carefully, clarify with questions if necessary, but don't challenge that person's expertise.

Instead of kindly suggesting that the addressee had best remain quiet when another person is speaking, the metonymically representative, more concrete action of keeping your mouth shut is used. Deliberate in its direct and strong tone, it is likely used by someone superior in experience to a novice or subordinate in the situation in question.

Here is an example of a metonymy performing positive evaluation:

A shy, self-effacing man, Williams was self-taught, and showed an independent and determined intellectual curiosity. He had a good ear for language, and was a talented scholar, translator, and lyric poet.

In this phrase, the most functional or relevant body part is used to metonymically represent the more abstract and complex concept of being adept at learning foreign languages. Such skills referred to here likely include the ability to catch and mimic different pronunciations, pick up new phrases easily, retain new vocabulary, and so on. Clearly, it is in praise of Williams, particularly with the inclusion of "good". The phrase can, however, also be found in the BNC with its omission in simply "an **ear** for music", "an **ear** for accents" and so on.

She stood and picked up her jacket from the back of her chair.
'Where you off to?'
'I'm going to see how the search is going on.'
'Leave that to the uniforms, they'll let us know soon enough if they find something.
It's bitter cold out.'

Uniforms serve to identify and unify specialised types of people, often of authority such as police or soldiers. As a set of clothing they are usually the prominent or distinguishing feature

of the wearer at work, and so a uniform as a non-human entity can be used to metonymically represent the human who wears it. In isolation, “the uniforms” may be fairly neutral, yet this particular context points to a more positive tone. The second speaker is curious or concerned about the search- possibly for a missing person. However, the first speaker reassures them that there is no need to go out into the cold, as “the uniforms” are capable of dealing with the situation and will inform them promptly if anything is discovered. This indicates that “the uniforms”, most probably representing the police, are trustworthy and thought of highly.

In contrast, in the following example, the metonymic expression, “the suits” performs negative evaluation:

Shortly before nine there was a general hubbub down the corridor and the Suits began to appear from their conferences, most of them holding styrofoam cups of coffee.

As a set of generic, typically formal clothing, a suit as a non-human entity can metonymically represent the human wearer such as a business or other professional person. Unlike uniformed people, however, suited figures are fairly indistinguishable. This deliberate and anonymising use of “the Suits”, instead of a more neutral “the attendees” or “the business people”, points to the writer’s negative sentiment. It seems implied that those suited have no personal identity and en masse simply make up a sea of suits. Here an additional contextual clue is the deliberate inclusion of the cup material, Styrofoam- a typically ‘cheap’ and unsophisticated one (as opposed to china or even paper).

Where there was ambiguity over the functions being performed by the metonymic expressions, the two judges conferred and other corpus examples were considered. The functional classification of the 19 investigated metonymies is shown in Appendix 4. Also shown are their types, and in the third column their closest correspondences with Kövecses’ (2002) and Radden and Kövecses’ proposed categories (1998).

Following successful piloting and refinement of the test, it was sent by email to 22 ‘intermediate to advanced’ English speaking Japanese participants, all located in Japan at the time. The questions were administered to the students and follow-up interviews with 11 of the participants were carried out by Skype video call to discuss how participants got their answers; allowing for exploration of particular problems and whether metonymies were known or novel. Participants were assured that the interviews were being audio recorded for the purposes of results analysis only.

In order to quantify the data gathered, a scoring system ranging from four points awarded for “full semantic and full pragmatic comprehension”, down to zero points for “semantic misunderstanding so failed pragmatic understanding or no answer attempted”. This is arguably subjective, but care was taken to examine all 22 sets of data repeatedly and thoroughly in an iterative (or ‘trial and error’) process in order to best grade and scale answers. It was anticipated that any semantic misunderstandings should be minimal, since the British National Corpus (BNC) examples were chosen carefully, piloted with similar level participants and glossed for particularly difficult words. However, it was born in mind that in provision of their answers, participants may have lacked the specific vocabulary, such as “clumsy” or “geek” (despite possibly having understood what was implied by “all fingers and thumbs” and “anorak”). Therefore, penalisation for lack of appropriate vocabulary was minimised, but possession of such rewarded with maximum points.

Findings

The findings from both parts of the study indicated that the students experienced difficulties understanding metonymy in English. However, there were also many cases of successful metonymy comprehension.

The students in the first part of the study were found to employ the following metonymy comprehension strategies:

- (a) Activating a particular ‘metonymy type’
- (b) Noticing the active zone/profile discrepancy
- (c) Using contextual clues

Somewhat surprisingly, these students appear to have coped well with cross-linguistic differences in the syntactic patterns that accompany involve metonymy. For example, English makes extensive use of denominal verbs whose meaning is metonymically related to the corresponding nouns, such as the use of ‘summered’ in the following example:

An injured bird also *summered* at Darwell Reservoir in 1958 (BNC).

This construction does not exist in Japanese, but it did not present significant problems to the participants in the study. There are interesting parallels between this finding and Piquer Píriz (2008)’s finding that syntactic form was not a distracting factor for young Spanish learners of English when accessing the figurative meaning of metonymies. Piquer Píriz found that the majority of the children who participated in her experiment had no problems comprehending metonymic multiword expressions (e.g. ‘give me a hand’ and ‘I didn’t open my mouth’) whose meanings were extended based on the salient functions of these body parts, even in cases where there was no corresponding expression in their native language. This is probably because these metonymies involve the extension of salient features and constitute worn metonymic relationships, such as the PART FOR WHOLE and ACTION FOR RESULT relationship.

The students in our study were much more likely to work out the meaning of metonymic denominal verbs when the action they denoted reflected a central characteristic of the noun. For example, they experienced very few problems with the metonymic expressions *be garaged*, and *be mothered*, as they reflect the characteristics that are central to the corresponding nouns (i.e. garages are places where cars are kept and mothers look after children). In contrast to this, the metonymy ‘to *landscape* the garden’ presented far more problems. All of the participants in the study thought that this meant ‘to have a view over a garden’. These participants appeared to be employing an OBJECT FOR ACTION metonymy, which is not involved in the English meaning of ‘to landscape’. In English, the meaning of this expression is to change the appearance of a piece of land, and none of the participants got this. Some participants went on to infer that it meant ‘to plant trees’, thus evoking a RESULT FOR ACTION metonymic relationship. This is closer to the actual meaning of the expression, though the participants were a little too specific in their explanation. Landscaping a garden may well involve planting trees, but it is equally likely to involve lots of other things, such as moving earth, planting flowers and chopping down trees. (‘to plant trees’). In this example, the participants wrongly focused on different parts of the Idealised Cognitive Model (ICM) (see Lakoff, 1987; Langacker, 2009). Because the meaning of ‘to landscape’ is not related to a central feature of a landscape, the participants found it harder to work out the meaning.

Therefore it appears that if the action that is being referred to is more salient in relation to the basic sense of the vehicle term, learners are more likely to interpret the item successfully. We also investigated whether or not there was a relationship between successful interpretation and the imageability of the items. We found a significant correlation ($p < 0.05$), indicating that it is easier to work out the meaning of highly imageable metonymies.

Many of the errors that students made in trying to interpret the metonymies were similar to the types of errors identified for metaphor by Littlemore *et al.* (2011). These included ‘under-specification’ (providing too little information), focusing on the wrong part of the ICM (as we saw above), misinterpreting contextual cues, and misinterpreting the syntax. Other errors related more closely to the fact that she was looking at metonymy, rather than metaphor. Most notably, a number of students interpreted the metonymic expressions as if they were metaphors. One example of this is the following:

It was obvious to everybody in Rome that he had to *marry money* → interpreted as meaning ‘to earn big money’

Here the intended metonymic component was not explained. Instead, the participant tried to interpret the word ‘marry’ metaphorically in that, he thought ‘to marry’ corresponded to ‘to need something immensely.’

Another example of this phenomenon is the following:

his younger brother and sister, who [...] seemed to *depend on the bottle* → interpreted as ‘to be attached to an obstacle/weak point’

Post-task discussion with this participant revealed that he had interpreted ‘depend on the bottle’ as referring to ‘an obstacle/weak point’ because he thought that it seemed similar to the term ‘bottleneck’ which is motivated by metaphor in English. Another example is as follows:

his younger brother and sister, who [...] seemed to *depend on the bottle* → interpreted as ‘to depend on their appearances’.

Here, the student explained that the bottle was a thing which hides its contents so it referred to ‘appearance’ which might hide human nature.

This confusion between metaphor and metonymy is perhaps a reflection of the fact that the two tropes often overlap and are often difficult to disentangle from one another (Barcelona, 2002; Goossens, 2002). Indeed, it has even been argued that the distinction between the two is somewhat artificial as both can involve the same set of overlapping cognitive processes (Barnden, 2010). Some of the inappropriate metaphorical interpretations could be attributed to cultural transfer from Japanese, as we can see in the following example:

Whoever it is says you're still *nosing about in business* which doesn't concern you → interpreted as ‘to be weary of business’.

The meaning provided by this student appears to be based on the Japanese expression “hana ni tsuku” (“to stick to one’s nose”) which metaphorically implies to ‘to be weary of something’.

Other types of errors included cases where the students conducted an apparently wrong lexico-grammatical analysis of the intended metonymical component, as we can see in the following example:

Being *mothered* by a grandparent was certainly not always a happily remembered experience → interpreted as ‘becoming mother’

Here the participant wrongly analysed this expression into the combination of gerund + adjectival.

In other cases, the students simply stayed within the vehicle subject matter and did not attempt any explanation of the metonymic component, as we can see in the following example:

Dobson and his mob just *laughed you off the street tonight* → interpreted as ‘to make fun of you on the street’

In other cases, the students accessed the wrong metonymy type in order to explain the expressions, as we can see in the following example:

a lone blues *trumpet* was improvising → interpreted as ‘a lonely blues sound was improvising’

Here the participant interpreted it as ‘sound’ by means of metonymy type INSTRUMENT FOR PRODUCT in English. The actual metonymy that is being evoked by this expression is INSTRUMENT FOR MUSICIAN, which is very common in English and which can be found in expressions such as the following:

It went with the sacking of the *first violin*, Marie-Alexandre Guenin (BNC)

Another example of a student evoking the wrong metonymy type is as follows:

In the garden you will see them *nosing around* trying to find a new place to dig a hole. → interpreted as ‘to growl’.

Here, the student explained that a nose produces a growling sound, so he wrongly understood it as an instantiation of INSTRUMENT FOR ACTION metonymy in English.

When the students were presented with the more subtle, Langacker-style ‘active zone’ metonymies, they tended to try and interpret them more as prototypical metonymies, as we can see in the final example:

Just as he was about to *open the beer* the doorbell rang. → interpreted as ‘to start a party’

This is not the intended meaning of the sentence in this context although one could possibly see it as a plausible explanation. The participant explained that parties generally start with opening the bottle(s) of beer, thus evoking a SUB-EVENT FOR WHOLE EVENT metonymy. This participant was able to understand the metonymic meaning of ‘open the beer’, but he

extended its metonymic meaning too far. Another way of explaining this interpretation is to see it as an instance of ‘metonymic chaining’ (Dirven, 2003) where one metonymy leads on to another. In other words, he identified two closely related metonymies, each of which moved the meaning further away from the ‘basic senses’ of the words in the sentence.

Other types of answer included those that were unclassifiable because of poor expression, as we can see in the following example:

[...] vehicles *garaged* in a certain Rating District → interpreted as ‘a certain rating garage’

Here it was impossible to understand what the participant meant by this response.

In other cases, students simply misunderstood the meaning of the vehicle term, as we can see in the following example:

When the Cordorys had finished *landscaping* their garden → interpreted as ‘to dig up their garden’

Here the student is reported to have misunderstood the basic meaning of landscape as ‘landslide.’

In line with Littlemore *et al*’s (2011) findings for metaphor, we identified cases of ‘underspecification’, an example of which is as follows:

Ludens *tiptoed* into the kitchen → interpreted as ‘to enter into the kitchen’.

The interpretation is valid in this context, but ‘to tiptoe’ conveys more meaning than simply ‘to enter’.

The main differences between these findings and those made by Littlemore *et al* (2011) for metaphor were that in this study, students tended to interpret metonymies as if they were metaphors and carried out unnecessary metonymic chaining. These are both cases of ‘over-interpretation’, suggesting that students may not be primed to identify metonymy and interpret it as such. This may be a result of the fact that of the two tropes, metaphor is far more widely known and people generally tend to know roughly what it is and how it should be dealt with. Metonymy is much more subtle and nuanced than metaphor and may thus present more problems to learners.

As we said above, the aim of Part 2 of the study was to explore the extent to which the function being performed by the metonym affected comprehension. In our initial analysis, we found a similar set of problems to those found in the first part of the study, which included the missing of important contextual clues, the rejection of possible meaning on account of perceptual ‘strangeness’, interference of linguistic equivalents in Japanese, under-specification, a tendency to become distracted by contextual features, reluctance to ‘make a guess’, and positive and negative interference from cultural differences or preferences. When we explored the relationship between levels of metonymy comprehension and the functions being performed by the metonyms, we found that metonymies serving complex functions such as humour, irony and euphemism were significantly more difficult to understand than

ones that served more ‘straightforward’ functions, such as hyperbole and positive evaluation (see Figure 1):

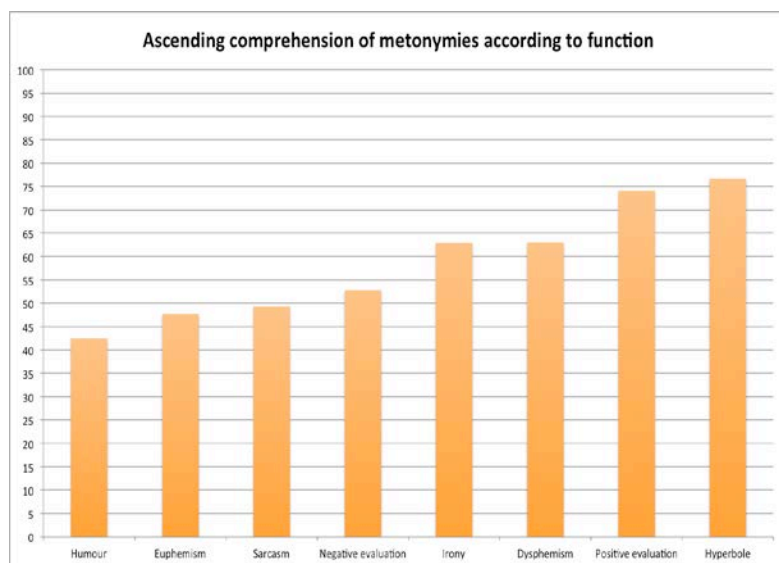


Figure 1. Comprehension scores for metonymies presented according to function

These findings can be partially explained by the extent to which the examples violated the cognitive principles underlying ‘typical’ vehicle selection that were identified by Radden and Kövecses (1999). Radden and Kövecses argue that principles such as HUMAN OVER NON-HUMAN and STEREOTYPICAL OVER NON-STEREOTYPICAL are key factors in determining vehicle choice in metonymy. When these ‘rules’ were broken, learners found it very difficult to interpret the metonymies correctly. Some of the violations of cognitive principles were more serious than others when it came to their effect on metonymy interpretation. For example, the metonymic euphemism ‘Is there somewhere where I can freshen up?’ was misunderstood by 59% of the participants in the study. This euphemism involves the deliberate violation of the CLEAR OVER LESS CLEAR principle, as the speaker presumably wishes to avoid saying that they need to use the toilet or wash their sweaty face - nor does the listener want to hear such candid information- and so it is socially appropriate or expected to disguise the real meaning. In contrast, the metonymic hyperbole, ‘all fingers and thumbs’ did not present any comprehension problems to the participants. This expression does not violate any cognitive principles and in fact adheres to several, including the CONCRETE OVER ABSTRACT, INTERACTIONAL OVER NON-INTERACTIONAL, and FUNCTIONAL OVER NON-FUNCTIONAL principles.

A number of cultural factors appeared to interfere, both positively and negatively, with the successful interpretation of metonymy. For instance, the sentence ‘Billie’s eyes popped out as she kissed Yanto’ was understood by 85.2% of the participants, a finding which could perhaps be attributed to the fact that the same expression exists in Japanese. Another sentence that was well understood was: ‘the Suits began to appear from their conferences’, which was understood by 76.5% of the participants. In Japan the notion of the smart-suited but somewhat conventional ‘salaryman’ is ubiquitous. Metonymies that were less well understood included ‘Why am I such an anorak?’ which was only understood by 37.5% of the participants. An anorak, characterised as a plain, indistinguishable item of clothing lacking in style, has come to be associated with a certain stereotypical wearer: the “trainspotter”. “Trainspotters” are originally a British phenomenon, and their association with anorak-

wearing only really occurs in Britain. Usually middle-aged men, they stand on train platforms excitedly logging train times and taking photos of the vehicles. Social stigma developed to hold them with some disdain for their peculiar fascinations. The trainspotter's characteristic item of clothing is the anorak, therefore, over time the anorak has come to metonymically represent any person overly fond of inane details that wouldn't interest the majority. Rather than being admired for being an expert in something, they tend to meet with social derision, although as in the above instance, "an anorak" can also be used comically in self-deprecation.

The problem here is that understanding an anorak to mean a nerd or a geek involves detailed cultural information about anoraks and the sort of people who wear them, and the sorts of 'semi-autistic' behaviours and hobbies that these people traditionally engage in, such as train-spotting. For the average Japanese person, there is no reason why an anorak should refer to anything other than an item of outdoor clothing. If a CLOTHING FOR PERSON metonymy were involved, they might think of a mountaineer or a person who likes the outdoor life, as these could be described as central features of anorak-wearers. The meaning intended in the above example draws on a particular, highly peripheral characteristic of an anorak-wearer.

Another item that was less well understood, possibly for cultural reasons was the sentence: 'all the pressures she was facing caused her to hit the bottle again', which was only understood by 36.4% of the participants. Here the problem may lie in the fact that the protagonist in the example was female. In Japanese society, getting drunk is more socially acceptable for men rather than for women and the fact that a woman is mentioned may have gone against the expectations of the participants and thus been misleading for them. Thus we can see that a range of factors contribute to the misinterpretation of metonymy by Japanese speakers of English and that these factors combine linguistic and cultural features.

Conclusions

This study has shown that metonymy does indeed present problems to Japanese learners of English. The range of problems that it presents are comparable to those for metaphor, with some exceptions, notably the fact that metonymy is often interpreted as if it were metaphor. Words whose metonymic meaning relied on core features of the basic sense were more easily understood than those whose metonymic meaning relied on peripheral features. One caveat is needed at this point: it could be that in some cases, the students simply did not know the meanings of the words with which they were presented, and the fact that metonymy was involved is neither here nor there. On the other hand, in many of their responses it is clear that they were familiar with the basic sense of the word and that they were unable to make the connection to its metonymic meaning in context, despite the presence of contextual cues.

Future studies could usefully explore the issue with a wider range of participants from more linguistic backgrounds. They could also look at the phenomenon from a developmental perspective. However, our findings are sufficient to suggest that it may be worth focusing on metonymy, and the functions it performs, in Japanese EFL classrooms, and that a possible way to introduce the topic might be to discuss the use of metonymy in Japanese, and then to focus on cross-linguistic variation in metonymy types.

References

Barcelona, A. (2002). Clarifying and applying the notions of metaphor and metonymy within

- cognitive linguistics: An update. Dirven, R., & Pörrings, R. (Eds.). (2002). *Metaphor and Metonymy in Comparison and Contrast*, De Gruyter Mouton, pp. 207-277.
- Barnden J. (2010). 'Metaphor and metonymy: making their connections more slippery'. *Cognitive Linguistics*, 21 (1), 1-34
- British National Corpus at Brigham Young University (BYU-BNC) accessed via <http://corpus.byu.edu/bnc/>
- Chen, Y-C and Lai, H-L. (2012). EFL learners' awareness of the metonymy-metaphor continuum in figurative expressions, *Language awareness*, 21 (3): 235-248.
- Deignan A. H. (2005). *Metaphor and Corpus Linguistics*, John Benjamins.
- Dirven, R. (2002).
- Goldberg, A. (1995). Constructions...
- Goossens, L. (2002). Metaphor and metonymy: the interaction of metaphor and metonymy in expressions for linguistic action. *Metaphor and metonymy in comparison and contrast*, 349-377.
- Kövecses, Z. (2002). *Metaphor: A practical introduction*. Oxford University Press, USA.
- Kövecses, Z., & Radden, G. (1998). Metonymy: Developing a cognitive linguistic view. *Cognitive Linguistics*, 9, 37-78.
- Lakoff, G. (1987). *Women, Fire, and Dangerous Things: What categories reveal about the mind*, University of Chicago, Chicago.
- Langacker, R. W. (2009). *Investigations in Cognitive Grammar*. Mouton de Gruyter.
- Littlemore, J. (2001). 'The use of metaphor in university lectures and the problems that it causes for overseas students.' *Teaching in Higher Education* 6: 333-351.
- Littlemore, J. (2015). *Metonymy: Hidden Shortcuts in Language, Thought and Communication*, Cambridge: Cambridge University Press.
- Littlemore, J. and Low, G. (2006). *Figurative Thinking and Foreign Language Learning*, Basingstoke: Palgrave MacMillan.
- Littlemore, J., P. T. Chen, A. Koester and J. Barnden. (2011). 'Difficulties in metaphoric comprehension faced by international students whose first language is not English.' *Applied Linguistics*, 23 (1): 1-23.
- Piquer-Piriz, A. (2008). Reasoning figuratively in early EFL: Some implications for the development of vocabulary, in F. Boers and S. Londstromberg, (Eds.) *Cognitive Linguistic Approaches to Teaching Vocabulary and Phraseology*, Berlin: Mouton de Gruyter, pp. 219-240.
- Radden, G. and Kövecses, Z. (1999). Towards a theory of metonymy, In K-U Panther and G. Radden (Eds.) *Metonymy in Language and Thought*, Amsterdam: John Benjamins, 17-59.

Appendices

Appendix 1. The examples of metonymy that participants in Part 1 of the study were asked to explain

- (1) Being mothered by a grandparent was certainly not always a happily remembered experience, and for one illegitimate Scots girl it generated a lifetime of mutual bitterness.
- (2) Cats hate to bury their faeces in a place where they have recently done so. In the garden you will see them nosing around trying to find a new place to dig a hole.
- (3) 'It's not your job to think.' Bill's voice betrayed genuine anger. 'We're still getting calls here about you, anonymous calls. Whoever it is says you're still nosing about in business which doesn't concern you.'
- (4) Rocks close under the window were covered with grey and orange lichens; further out they were encrusted with barnacles and beyond that they were blanketed with brown seaweeds, their slimy fronds gleaming in the sunshine.
- (5) When the Cordorys had finished landscaping their garden, they decided to add the finishing touches and brighten it up by designing and making their own garden furniture.
- (6) The rooms, painted green, were dark and damp and smelled of alien growths. Ludens tiptoed into the kitchen and was amazed to see two mugs on the table with remnants of tea in them.
- (7) 'Look son, you'll have to act a bit more positively. Be a bit firmer with the neds or they'll walk all over you. Dobson and his mob just laughed you off the street tonight and we can't afford that.' It was true of course. Dobson was an expert at knowing just how far he could go without actually breaking the law. Martin had confronted him — and lost. It was Dobson and his gang who were left on the street, laughing, while he had to slink shamefully away.
- (8) Since 1965 the species has been noted in each month between October (21st) and May (30th), but there are earlier records for July (31st, 1959), and September (27th-30th, 1958). An injured bird also summered at Darwell Reservoir in 1958.
- (9) The continuing rise in claims costs has made it necessary to increase the Society's premium rates for all classes of motor policy. For some policyholders the increase is partially or even wholly offset by adjustments made to the premiums for (a) certain models of motor car for which the Rating Group has been reduced and (b) vehicles garaged in certain Rating Districts where the claims experience has been particularly satisfactory.

- (10) Somewhere in the formless murk, a lone blues trumpet was improvising around 'Love for Sale'. It was an agonised wailing, bluesy and brilliant.
- (11) The wind seems to whistle through the doors and windows.
- (12) Nothing is sacred; when the Princess of Wales bought a Mercedes in February he accused the Royals of 'showing contempt for British workers while living off the fat of the land'.
- (13) Dressing for television is covered at length (ties made from madder silk and with an Olney knot at the best for keeping the microphone in place). And there is a good account of the infamous Nixon/Kennedy TV debate when Kennedy's aide even turned up the heat in Nixon's dressing-room to make him sweat more.
- (14) Rufus had suggested to Adam that he sell something out of the house, a piece of china or some silver. There were almost more antique and second-hand shops in some of those villages than there were houses.
- (15) On December 18th Hoare resigned, to be replaced by Anthony Eden, widely seen as a champion of the League. The overthrow of a Foreign Secretary was a considerable achievement for a popular agitation, but this was to be the limit of the peace Ballot's success. During the months that followed, as Mussolini bombed and gassed the Abyssinians into subjection, no serious attempts were made by the British Government to implement effective sanctions.
- (16) 'Where are you parked?' 'Just down the road. [...]'
- (17) She knew that the prince was not well off, he never made any bones about it. It was obvious to everybody in Rome that he had to marry money. He had his widowed mother living with him and two sisters who had to get husbands; both Mr James and Constanza say that it would have been considered an almost monstrous act of selfishness if the prince had insisted on marrying one of the Montecatini or Roccarosa girls for their *beaux yeux*.
- (18) Unlike both his younger brother and sister, who clearly suffered from an inability to form stable ties with other people and seemed to depend on the bottle to bolster their self-assurance, Valentin's reputation was almost that of a good prince in a fairy-tale.
- (19) He opened the freezer and helped himself to a cold beer and the last of the chicken drumsticks from the packet he had bought earlier in the week. He tossed the empty packet onto the overflowing bin in the corner of the room and sat down at the table. Just as he was about to open the beer the doorbell rang. He shook his head in despair then got to his feet and went to open the door.

- (20) US officials insist that Washington is not pushing the idea, but confirmed that it will be a topic of conversation when the chairman of the Federal Reserve, Alan Greenspan, visits Moscow this weekend.

Appendix 2: The examples of metonymy that participants in Part 2 of the study were asked to explain

1. 'I believe that by doing sports, eventually I won't want to smoke,' she predicts. This new-found health regime (*health regime*: 健康管理の方法) has, she says, changed her life. 'I have more energy and I'm thinking clearer [...]' She says she also sleeps better and wakes up with a clearer head which is not the sort of image she portrayed a couple of years ago when all the pressures she was facing caused her to hit the bottle again.
2. 'Take all the time you need. When you've finished, why not pop along and join us? I'll keep the coffee hot and try to save you a biscuit or two. Niall may even have surfaced (*surface*: 現れる) by the time you join us.'
'I'll be there. By the way, is there somewhere where I can freshen up?'
'Sure, at the end of the ward and along the corridor.'
3. "Enraged cow injures farmer with ax" (*enraged*: 激怒した, *ax*: 斧)
4. "Local high school drop-outs cut in half" (*drop-outs*: ドロップアウト)
5. "Yes, this is the Pokémon phenomenon that has swept the UK. One school in Berkshire has banned Pokémon after instances of bullying (*instances of bullying*: いじめの事例) to obtain the rarer cards. The bullying has finally stopped however, now that Mr. Hunt the geography teacher has the complete set."
6. He walked into the bedroom and began to dress. Fumbling (*fumble*: 探し回る) with his black tie, he swore (*swore*: 悪態をついた) in frustration. 'Christina, help.' She came into the bedroom on his third plea (*plea*: おねだり) . 'I can't tie the damn thing; I'm all fingers and thumbs.'
7. The three other members of her party looked around in surprise as the blonde gave a squeal of delight (*squeal of delight*: 喜びの悲鳴) and walked unsteadily across to Yanto. Billy's eyes popped out as she kissed Yanto on the cheek and flopped into a chair beside him. 'My hero,' she laughed, and looked at Billy.
8. Outside in the street I took her hand for the first time.
'It's been such a comfort talking to you, Alison. You don't know how it's helped. Will you...?'
'I'll do everything I can,' she said, freeing herself. I nodded meekly. (*nodded meekly*: 無気力にうなずいた) 'Don't look so glum! (*glum*: 陰気な)' she added. 'It's not the end of the world.'
And off she went to collect her son from St Philip and James Primary School.

9. Santa Barbara and many other bike-friendly cities have bike racks on every block of their downtown, and beautification (*beautification*: 美化) projects that don't make life ugly for bicyclists. As a result, they have more people bicycling. Hey, **it isn't brain surgery**. Provide facilities that make bicycling easy and pleasant, and people will do it.
10. The Saint that expelled (*expelled*: 追い出した) all the snakes from Ireland [...] This Sunday the 17th of March is St Patrick's Day, celebrated world wide, where **every man and his dog** seems to lay claim (*lay claim*: 主張する) to an Irish connection.
11. 'Kindly explain.'
With a sigh of impatience (*with a sigh of impatience*: めんどくさそうにため息をついて) Jake leaned back in his seat and ran his fingers through his thick dark hair.
'OK, I'll **spell it out** to you, if that's what you want. My father left Kirsty a considerable amount of money to be held in trust (*trust*: 信託基金) until she reaches eighteen...' He paused. 'Do I really need to go any further?'
12. Critically review your own experience and learn. Attend training courses and learn. Do not attempt to broaden your boundaries by becoming an expert in everything. **Keep your mouth shut** when another person talks. Listen carefully, clarify with questions if necessary, but don't challenge that person's expertise.
13. Dishonoured detective Nick Conklin (Michael Douglas) and his easy-going partner Charlie Vincent (Andy Garcia) escort a desperately ruthless (*ruthless*: 冷酷な) yakuza from New York to Osaka. When he is **snatched from under their noses**, (*snatch*: つれさる) they join forces with the Japanese police to recover their man.
14. A shy, self-effacing man (*self-effacing*: おとなしい), Williams was self-taught, and showed an independent and determined intellectual curiosity. He had a **good ear** for language, and was a talented scholar, translator, and lyric poet.
15. The shops here are very good, but Dana is inclined to **turn her nose up** at anything outside London or Paris, so I imagine an hour could see her back at the flat.
16. Shortly before nine there was a general hubbub (*hubbub*: がやがやしていた) down the corridor and **the Suits** began to appear from their conferences, most of them holding styrofoam (*styrofoam*: 発砲スチロール) cups of coffee.
17. She stood and picked up her jacket from the back of her chair.
'Where you off to?'
'I'm going to see how the search is going on.'
'Leave that to **the uniforms**, they'll let us know soon enough if they find something. It's bitter cold out.'
18. Cutlery (*cutlery*: 食卓用の金物) consists of knives, forks and spoons, right? Wrong - only things that cut, (shears (鋏), sickles (鎌) and scissors (はさみ) as well as knives) are properly termed cutlery. Another misapprehension is that stainless steel (*stainless steel*: ステンレスの鉄) is so called because it does not stain; in fact, the name merely denotes that it stains less than other steel. Why am I such **an anorak** on the subject of cutlery?

19. Less than two minutes after becoming Mrs Tim Laurence, she stood beside him on the steps of Crathie Church, Balmoral and pointed to the nearest Range Rover. 'Get in the car,' she told her husband. The words were said, not harshly (*harshly*: 厳しく) but firmly (*firmly*: しっかりと), according to one guest at the most unconventional (*unconventional*: 型破りな) royal wedding ever. 'There's no doubt who'll wear the trousers in that house,' said one elderly lady watching with amusement.

Appendix 3: Classification of the metonyms used in Part 2 of the study

Metonymy	Type	Closest correspondence with Radden & Kövecses' categories	Primary function
hit the bottle	CONTAINER FOR CONTENTS	CONTAINER FOR CONTENTS	Euphemism
freshen up	RESULT FOR ACTION(S)	RESULT FOR ACTION	Euphemism
Enraged cow injures farmer with ax	DOUBLE (HUMOROUS) METONYMIC READING FRAME	n/a	Humour
Local high school drop-outs cut in half	DOUBLE (HUMOROUS) METONYMIC READING FRAME	n/a	Humour
Pokémon and Mr. Hunt story	MOVE TO ALTERNATIVE (HUMOROUS) METONYMIC READING FRAME	n/a	Humour
all fingers and thumbs	BODY PART FOR (LACK OF) ABILITY	PHYSICAL/BEHAVIOURAL EFFECT FOR *EMOTION CAUSING IT	Hyperbole
eyes popped out	PHYSICAL/BEHAVIOURAL EFFECT FOR EMOTION CAUSING IT	PHYSICAL/BEHAVIOURAL EFFECT FOR EMOTION CAUSING IT	Hyperbole
not the end of the world	(NEGATION OF) LARGE-SCALE EVENT FOR SMALL-SCALE EVENT	SPECIFIC FOR GENERIC	Sarcasm
it isn't brain surgery	(NEGATION OF) COMPLEX PROCESS FOR SIMPLE PROCESS	SPECIFIC FOR GENERIC	Sarcasm
every man and his dog	SPECIFIC MEMBERS FOR ALL MEMBERS	SPECIFIC FOR GENERIC/ MEMBER OF A CATEGORY FOR THE CATEGORY	Irony
spell it out	LITERAL SPELLING FOR SIMPLIFIED EXPLANATION	SUBEVENT FOR WHOLE EVENT	Irony
keep your mouth shut	PHYSICAL ACTION FOR (CEASING OF) VOCAL PRODUCTION	*SUBEVENT FOR WHOLE EVENT	Dysphemism
snatched from under their noses	PROXIMITY TO FACE FOR PHYSICAL PROXIMITY AND VISIBILITY	*SUBEVENT FOR WHOLE EVENT	Dysphemism
a good ear	BODY PART FOR ABILITY	INSTRUMENT/ORGAN OF PERCEPTION FOR THE *PERCEPTION	Positive evaluation

turn her nose up	PHYSICAL ACTION FOR (NEGATIVE) ATTITUDE	PHYSICAL/BEHAVIOURAL *EFFECT FOR EMOTION CAUSING IT	Negative evaluation
the Suits	CHARACTERISTIC CLOTHING FOR CATEGORY OF PERSONS	DEFINING PROPERTY FOR CATEGORY/ POSSESSED FOR POSSESSOR	Negative evaluation
the uniforms	CHARACTERISTIC CLOTHING FOR CATEGORY OF PERSONS	DEFINING PROPERTY FOR CATEGORY/POSSESSED FOR POSSESSOR	Positive evaluation
an anorak	CHARACTERISTIC CLOTHING FOR CATEGORY OF PERSONS	DEFINING PROPERTY FOR CATEGORY/POSSESSED FOR POSSESSOR	Negative evaluation
wear the trousers	CHARACTERISTIC CLOTHING FOR CATEGORY OF PERSONS	DEFINING PROPERTY FOR CATEGORY/POSSESSED FOR POSSESSOR	Positive evaluation